

general formula (2). The dependency of corresponding claim 6 has been amended accordingly.

Applicants note the Examiner's kind indication that the previous requirement was an election requirement and not a restriction and also note the withdrawal of the election requirement. Both indications are acknowledged with appreciation.

In response to the Examiner's notation that the listing of references in the specification is not a proper Information Disclosure Statement ("IDS"), Applicants now submit an IDS citing four references on form PTO-892.

Accordingly, Applicants respectfully request the Examiner to reconsider and allow all claims pending in this application in view of the following amendments and remarks.

1. Rejection of Claims 1-11 and 14-17  
under 35 U.S.C. § 112, ¶ 1

The Office Action rejects claims 1-11 and 14-17 under 35 U.S.C. § 112, ¶ 1 because the specification, while enabling for dimethylpolysiloxane, is alleged not to reasonably provide enablement for all organopolysiloxanes. The Office Action states:

The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in

scope with these claims.

The following Wands factors are considered.

The quantity of experimentation necessary

Applicants enabled dimethylpolysiloxane and not all polysiloxanes. Since the specification teaches dimethylpolysiloxane and failed to teach other polysiloxanes, the amount or quantity of experimentation would be unreasonable and of undue burden to one of ordinary skill or one of skill in the art to through experimenting the invention with all the known and yet to be discovered polysiloxanes.

The amount of direction or guidance presented

Applicants presented guidance to metal oxide-dimethylpolysiloxane, guidance is not provided for other organopolysiloxanes.

The predictability or unpredictability

Exemplification was given only for dimethylpolysiloxane and it will require a great deal of experimentation to determine which of the other organopolysiloxanes would work in the invention.

The breadth of the claims

The scope of the claims is not commensurate with the disclosure because the specification does not provide enablement for all organopolysiloxanes. The person of ordinary skill would be required to perform undue experimentation to determine all the organopolysiloxanes that may work in the invention.

Applicants respectfully traverse this rejection because one of ordinary skill in the art would have been enabled to make the presently claimed invention. However, in the interest of advancing

prosecution Applicants have amended independent claim 1 to recite the compound of the general formula (1) of claim 4 as the organopolysiloxane. Similarly, independent claim 6 has been amended to recite the organopolysiloxane derivatives of the general formula (2) of the claim 8 as the recited organopolysiloxane.

Applicants note that the amendments are not related to a substantial question of patentability. Moreover, Applicants specifically reserve the right to pursue the canceled subject matter in co-pending application.

Since the claims now recite specific dimethylpolysiloxanes, there is no question as to the question of enablement for the particular classes of organopolysiloxanes as disclosed and claimed.

Accordingly, Applicants respectfully submit that one of ordinary skill in the art is enabled to make and use the presently claimed invention and therefore respectfully request the Examiner to reconsider and withdraw the outstanding rejection under § 112, ¶ 1.

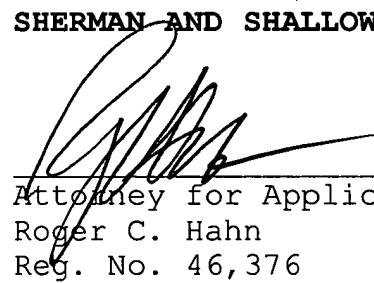
#### **CONCLUSION**

In light of the foregoing, Applicants submit that the application is now in condition for allowance. The Examiner is

therefore respectfully requested to reconsider and withdraw the rejection of the pending claims and allow the pending claims. Favorable action with an early allowance of the claims pending is earnestly solicited.

Respectfully submitted,

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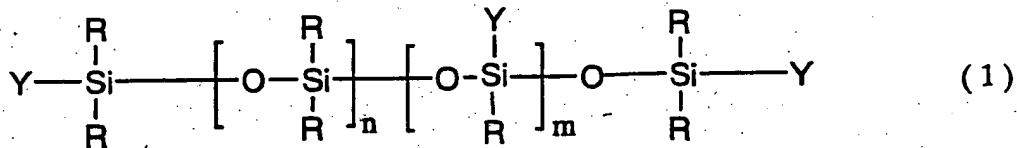
In re Application of: ) Group Art Unit: 1615  
NAKADE; KAMEYAMA ) Examiner: B. FUBARA  
Serial No. 10/078,402 )  
Filed: February 21, 2002 )

For: METAL OXIDE-ORGANOPOLYSILOXANE HYBRID POWDER AND A  
METHOD FOR THE PREPARATION THEREOF AND A COSMETIC  
COMPOSITION THEREWITH

Appendix A

Please amend the claims according to the July 30, 2003,  
revision to 37 C.F.R. § 1.121 concerning a manner for making claim  
amendments.

1. (Currently Amended) A metal oxide-organopolysiloxane  
hybrid powder, wherein a silicon atom of organopolysiloxane  
the compound which forms residue group represented by general  
formula (1),



wherein, R is an alkyl group selected from the group  
consisting of a methyl group, an ethyl group and a propyl group,

a phenyl group and can be same or can be different, Y is a group represented by  $-R$  or  $-R^1-Si(-O-)_3$ , wherein  $R^1$  is an alkylene group of carbon number 1-5, and can be same or can be different and at least one is  $-R^1-Si(-O-)_3$ ,  $n=1-100$  and  $m=0-5$  is bonded by covalent bond with a metal atom through an oxygen atom.

2. (Original) The metal oxide·organopolysiloxane hybrid powder of claim 1, wherein metal oxide is titanium oxide and/or zirconium oxide.

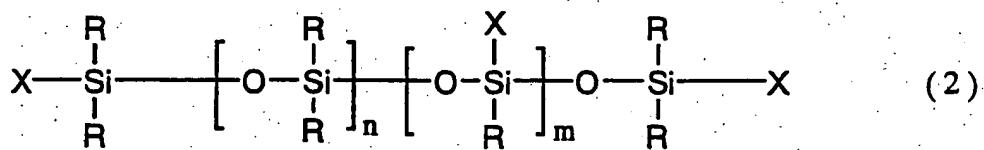
3. (Original) The metal oxide·organopolysiloxane hybrid powder of claim 1, wherein metal oxide is titanium oxide and whose specific surface area is larger than  $50\text{ m}^2/\text{g}$ .

4. (Canceled)

5. (Currently Amended) The metal oxide·organopolysiloxane hybrid powder of claim 4 2 or claim 3, wherein R of general formula (1) is a methyl group.

6. (Currently Amended) A method for producing metal oxide·organopolysiloxane hybrid powder which comprises; generating sol by hydrolysis of metal alkoxide, adding reactive

organopolysiloxane the organopolysiloxane derivatives represented by general formula (2),

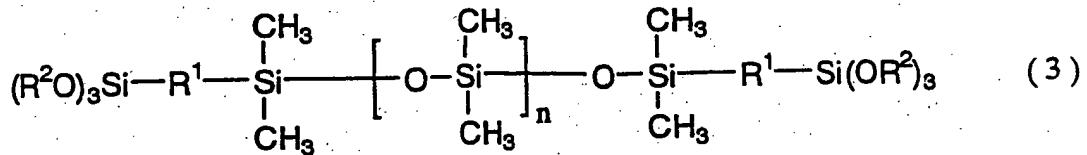


wherein, R is an alkyl group, selected from the group consisting of a methyl group, an ethyl group and a propyl group, a phenyl group and can be same or can be different, X is a group represented by  $-\text{R}$ ,  $-\text{H}$  or  $-\text{R}^1-\text{Si}(\text{OR}^2)_3$ , wherein  $\text{R}^1$  is an alkylene group of carbon number 1-5 and  $\text{R}^2$  is hydrogen or an alkyl group of carbon number 1-5 and can be same or can be different and at least one is  $-\text{H}$  or  $-\text{R}^1-\text{Si}(\text{OR}^2)_3$ ,  $n=1-100$  and  $m=0-5$  to said sol to generate hybrid sol solution, then dropping the obtained hybrid sol solution into mixed solution of alkaline aqueous solution and organic solvent.

7. (Original) The method for producing metal oxide:organopolysiloxane hybrid powder of claim 6, wherein metal is titanium and/or zirconium.

8. (Canceled)

9. (Original) A method for producing porous metal oxide-organopolysiloxane hybrid powder which comprises; generating sol by hydrolysis of titanium alkoxide, adding organopolysiloxane derivatives possessing end alkoxy groups represented by general formula (3) so as the molar ratio of alkoxide of titanium and said organopolysiloxane derivatives to be 3:1-50:1, to said sol to generate hybrid sol solution,



wherein  $\text{R}^1$  is an alkylene group of carbon number 2-4,  $\text{R}^2$  is  $\text{CH}_3$  or  $\text{C}_2\text{H}_5$  and  $n=6-16$ ,

then dropping the obtained hybrid sol solution into mixed solution of alkaline aqueous solution and organic solvent.

10. (Original) A titanium oxide-silica composite prepared by heat treatment of porous titanium oxide-organopolysiloxane hybrid powder, wherein a silicon atom of the organopolysiloxane is bonded by covalent bond with a titanium atom through an oxygen atom and hybridized homogeneously and whose specific surface area is larger than  $50 \text{ m}^2/\text{g}$ .

11. (Original) A producing method of the titanium

oxide·silica composite by the heat treatment at the temperature of 300-700 °C of porous titanium oxide·organopolysiloxane hybrid powder, wherein a silicon atom of the organopolysiloxane is bonded by covalent bond with a titanium atom through an oxygen atom and hybridized homogeneously and whose specific surface area is larger than 50 m<sup>2</sup>/g.

12. (Canceled)

13. (Canceled)

14. (Previously Presented) A cosmetic composition comprising the metal oxide·organopolysiloxane hybrid powder of any one of claims 1 to 3.

15. (Canceled)

16. (Previously Presented) A cosmetic composition comprising the metal oxide·organopolysiloxane hybrid powder of claim 5.

17. (Previously Presented) A cosmetic composition comprising the metal oxide·silica composite of claim 10.